

REMARKS

Applicants wish to thank the Examiner for the careful consideration given this case. Claims 3-14 are pending in this case. Herein, Claim 2 is cancelled and Claims 3, 7, 8, 10, and 14 are amended. Applicants note that the Examiner has indicated that "Claims 2-17 are rejected" on the Office Action Summary page. To maintain the record, Applicants note that Claims 15-17 do not exist within the present case and are not pending.

Applicants request that the Examiner reconsider the present rejections in view of the amendments and the remarks presented herein. This response addresses those issues raised in the Office Action mailed on September 11, 2003. It is submitted that, as currently amended, the claims are in condition for allowance. Communication to this effect is respectfully requested.

The Examiner rejects Claim 10 under 35 U.S.C. § 112, second paragraph as being indefinite. The Examiner asserts that Claim 10 is vague and indefinite as to what type of material is intended by "punching sheet". Applicants have amended Claim 10 to address the Examiner's concern in this case. Reconsideration of this rejection is respectfully requested.

The Examiner rejects Claims 2-3, 6-10, and 13-14 under 35 U.S.C. § 102(b) as being anticipated by Kearns et al. The subject matter of Claim 2 has been incorporated into Claims 7 and 14. Thus, Claim 2 has been cancelled. As is clear by simple inspection, the device is distinct from the presently-claimed invention for multiple reasons.

The device of Kearns et al. is not a dry analytical element but a microtiter plate (col. 4, line 9). As a result, when compared with amended independent Claims 7 and 14, Kearns et al. do not teach a water impermeable

support and a hydrophilic polymer layer on the support, a mesh layer and a hydrophilic polymer layer. In this regard the Examiner asserts that the absorbent substrate is interpreted as a mesh, and the water impermeable support has been read onto the microtiter plate of Kearns et al., which may be directed to tray 60.

A fundamental difference between the presently-claimed invention and Kearns et al. is in the presence of the hydrophilic polymer layer. In the field of dry analytical elements, the hydrophilic polymer layer is formed of a water-soluble and/or swelling polymer (page 8, lines 9-10 of the present application). Moreover, the hydrophilic polymer layer is transparent (page 8, lines 22-23) and very thin, *i.e.* 2 μm to 100 μm in dry thickness (page 8, lines 23-24).

In contrast to the presently-claimed invention, the absorbent substrate of Kearns et al. is made of polyolefin, polyester, polyvinyl chloride, and polystyrene (col. 6, lines 4-6) which are hydrophobic and water soluble. Since they are porous (col. 6, line 8), they should be opaque. Moreover, an absorbent substrate is much thicker than the hydrophilic polymer layer of the presently-claimed invention, which is clear from Figure 6 wherein a thick absorbent substrate is shown and in the Example wherein pore size of 30 microns is indicated (col. 10, line 26). In any event Kearns et al. do not teach the use of a hydrophilic polymer, as presently claimed in independent Claims 7 and 14.

Moreover, the function of the hydrophilic polymer layer of the present invention is also different from the absorbent substrate of Kearns et al. The hydrophilic polymer layer spreads a liquid sample in a planar direction uniformly. On the other hand, the absorbent substrate of Kearns et al. passes a liquid sample through capillaries formed by its porous structure to catch analyte by the binder supported in the abstract substrate (col. 1, lines 41-51). That is, in

the absorbent substrate, a liquid sample flows vertically – not in a planar direction.

Moreover, function of the water impermeable support of the present invention is different from the tray of Kearns et al. Specifically, the support of the dry analytical element of the present invention prevents the permeation of liquid sample to assist in the planar dispersion of the sample. In contrast, the tray of Kearns et al. is a mere container (col. 4, lines 15-16).

With respect to the presently-claimed mesh layer, the Examiner asserts that the absorbent substrate of Kearns et al. corresponds to the claimed element of a mesh. It is respectfully submitted that absorbent substrate and mesh have distinct meanings within the art and that Applicants are clearly claiming a mesh.

As the Examiner is aware, a claim is anticipated by a prior art reference if, and only if, each and every claim limitation may be found, either expressly or inherently described, in a single prior art reference. MPEP § 2131.01. It is respectfully submitted that Kearns et al. does not satisfy this requirement. Accordingly, the rejection under § 102 are inappropriate. Reconsideration and withdrawal of these rejections is respectfully requested.

The Examiner rejects Claims 4-5 and 11-12 as being obvious under 35 U.S.C. § 103(a) over Kearns et al. It is submitted that the arguments presented *supra* regarding Kearns et al. are applicable in addressing the present obviousness rejection. It is respectfully submitted that as presently pending, the claims are allowable over the cited art. Reconsideration and withdrawal of the pending obviousness rejection is respectfully requested.

In view of the amendments to the claims and the remarks presented herein, it is respectfully submitted that the present application is in condition for

final allowance and notice to such effect is requested. If the Examiner believes that additional issues need to be resolved before this application can be passed to issue, the undersigned invites the Examiner to contact him at the telephone number provided below.

Respectfully submitted,

Dated: December 11, 2003

By


Gerald H. Kiel

Reg. No. 25,116

REED SMITH LLP
599 Lexington Avenue
New York, NY 10022
(212) 521-5403

Attorney for Applicant